

### Abstract of the Disclosure

Watermarks  $WM_1 \dots WM_k \dots WM_N$  are applied to sections  $1 \dots k \dots N$  of digital media content on a recording medium having an identification number (CDID) by combining numerical values representing CDID,  $N$  and  $i$  in accordance with a concatenated hashing function, to derive a numerical value for  $WM_{[i]}$ . The numerical value for  $WM_i$  is applied to section  $i$ , where  $i$  is selectively each of  $1 \dots N$ . The watermark of section  $j$  is checked by determining the numerical values of CDID,  $j$  and  $N$  from the read digital media content and determining the watermark  $WM_{ja}$  actually read from section  $j$ . The determined numerical values of CDID,  $j$  and  $N$  are combined by using the same hashing function that is used to derive  $WM_i$  to derive a digital signal for the watermark  $WM_{jr}$  read from section  $j$ .

The digital signal for watermark  $WM_{jr}$  that should be read from section  $j$  is compared with an indication of the numerical value for the watermark  $WM_{ja}$  actually read from section  $j$ . If CDID is read directly from the medium, the  $WM_{jr}$  that should be read from section  $j$  is derived from  $H(CDID \diamond N \diamond j)$  where  $H$  is the hashing number and  $\diamond$  is the concatenation of numbers. If CDID can be read directly,  $H(CDID)$  is determined by modular subtraction of  $H(N \diamond k)$  from the value of  $WM_{ja}$  actually read from section  $j$ .